TANK WARS
TANK BUILDER

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INTRODUCTION

Thank you for purchasing the Tank Wars – Tank Builder! This documentation has been written to give you a detailed overview of the asset. The aim of the tank builder is to help you create a playable tank as quickly and efficiently as possible. It was developed with flexibility and customizability in mind allowing you to quickly add new and exciting options to your tank. Once complete, you may then play with it at the click of a button.

This manual will help you learn how the tank builder works, how to set it up properly, and how to use all the additional systems in place. While this manual cannot cover every possible eventuality, there are various methods of contacting me which can be seen in the contact section.
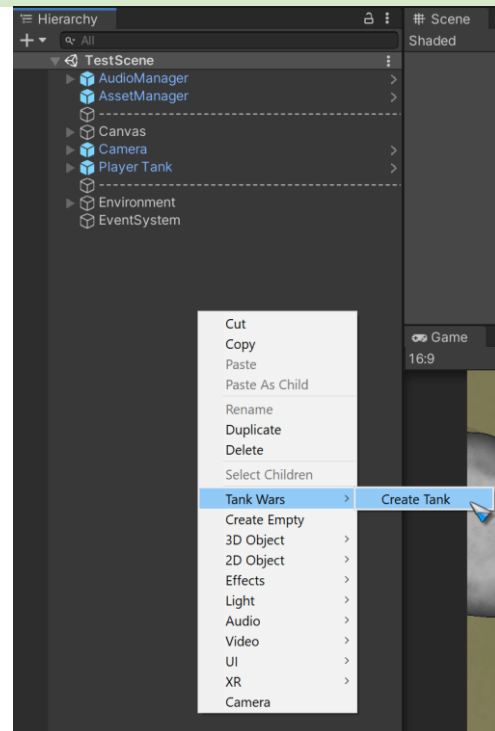
QUICK SETUP

To quickly step up your own tank, please follow the steps below:

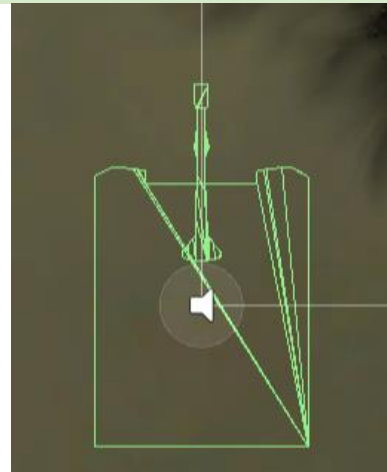### STEP 1 - ADDING THE TANK

In the hierarchy, right click an open space and hover over Tank Wars.
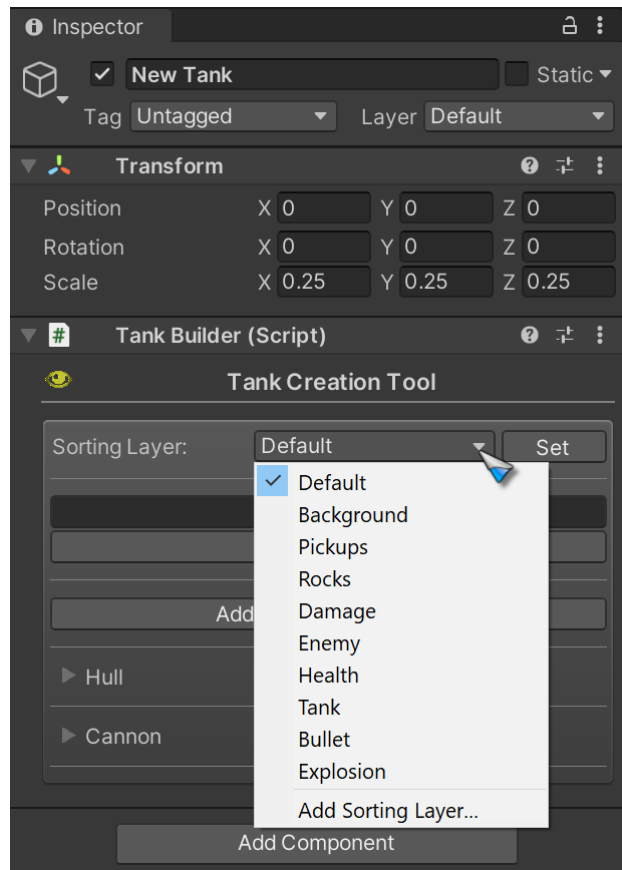
Click the option "Create Tank".

STEP 2 - SETTING THE SORTING LAYER

With the gizmos enabled, a new tank will have appeared with the name "New Tank". If the tank is not visible and only the outline (polygon collider gizmo) is seen as shown in image on the right, a sorting layer must be set.
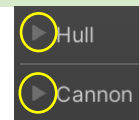
To change the tanks current sorting layer, click the sorting layer dropdown and choose between the existing options. To create a new sorting layer, click the "Add Sorting Layer" option. Once a sorting layer has been selected, click the "Set" button on the right.

If done correctly, your tank should automatically appear above the sprites that were covering it.

Inspector				🔒 ⋮
✅	New Tank			Static ▾

Tag Untagged ▾   Layer Default ▾

Transform ❓ ⌗ ⋮

Position	X 0	Y 0	Z 0
Rotation	X 0	Y 0	Z 0
Scale	X 0.25	Y 0.25	Z 0.25

Tank Builder (Script) ❓ ⌗ ⋮

Tank Creation Tool

Sorting Layer: Default ▾   Set

- ✓ Default
- Background
- Pickups
- Rocks
- Damage
- Enemy
- Health
- Tank
- Bullet
- Explosion
- Add Sorting Layer...
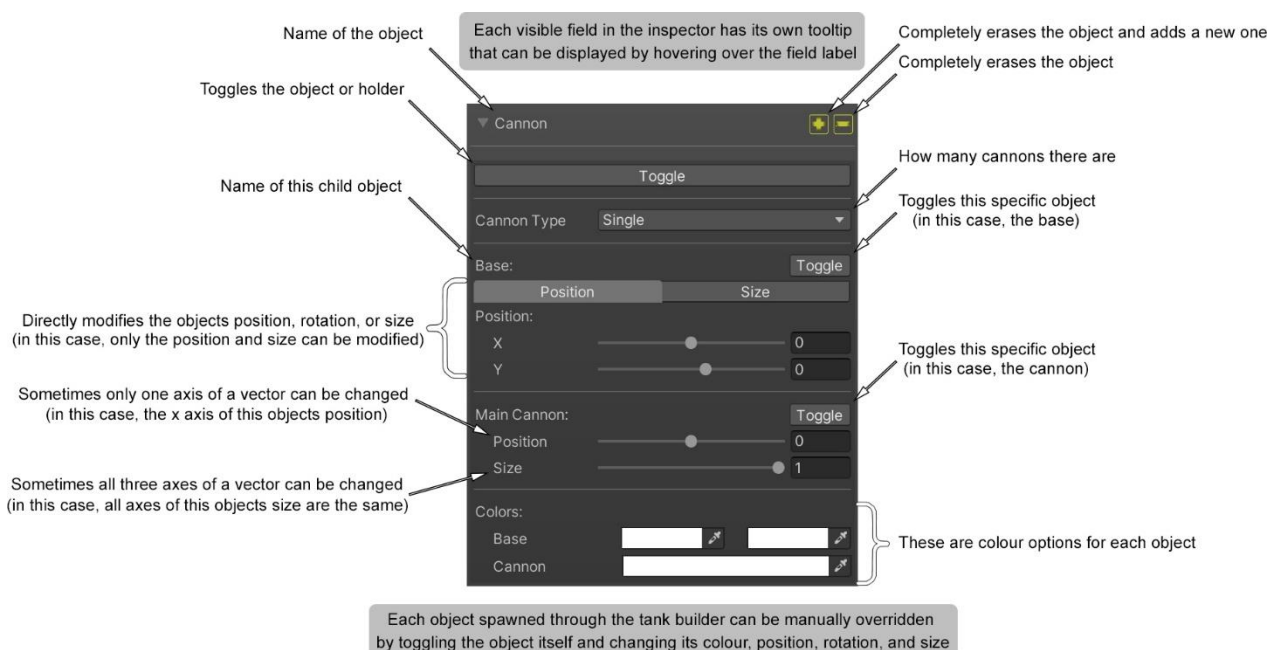
Add

▶ Hull

▶ Cannon

Add Component

STEP 3 - OBJECT CONFIGURATION

A hull and cannon will already have been added and can now be seen along with the polygon collider gizmo. To configure these two objects, click the dropdown arrows as seen the image on the right.

▶ Hull

▶ Cannon

Each element will come with its own set of options, below is an example of the cannon object:

Name of the object

Each visible field in the inspector has its own tooltip that can be displayed by hovering over the field label

Completely erases the object and adds a new one

Completely erases the object

Toggles the object or holder

▼ Cannon   ➕ ➖

Name of this child object

Toggle

Cannon Type   Single ▾

How many cannons there are

Toggles this specific object (in this case, the base)

Base: Toggle

Directly modifies the objects position, rotation, or size (in this case, only the position and size can be modified)

Position   Size

Position:

X   0
Y   0

Toggles this specific object (in this case, the cannon)

Sometimes only one axis of a vector can be changed (in this case, the x axis of this objects position)

Main Cannon: Toggle

Position   0
Size   1

Sometimes all three axes of a vector can be changed (in this case, all axes of this objects size are the same)

Colors:

Base
Cannon

These are colour options for each object

Each object spawned through the tank builder can be manually overridden by toggling the object itself and changing its colour, position, rotation, and size

STEP 4 - ACCESSORIES

With the base tank now coloured, accessories can be added:

In the **resources folder** within the **project tab**, go to the following directory:

"Resources\TankWars\Sprites"

Within this folder all accessory categories that came with this asset can be found. Many more categories can also be added by creating a new folder in that same directory and placing any number of Unity supported images inside. If a category is going to contain only one image, then the creation of a folder is not necessary.
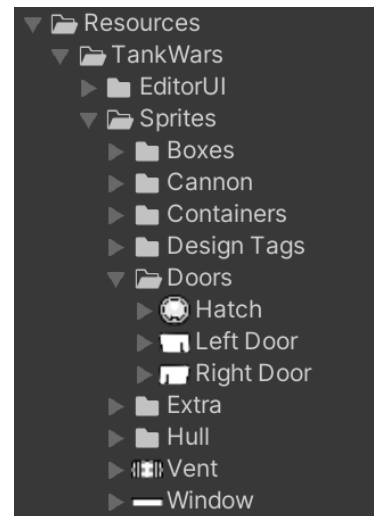
With all categories placed correctly in the sprites folder within the resources, the tank builder will automatically detect these and add them as assignable categories. Click the "Add Category" button and category can be chosen as seen in the image on the right.

If you do not wish to add a custom name to the category, the original folder name will be added instead.
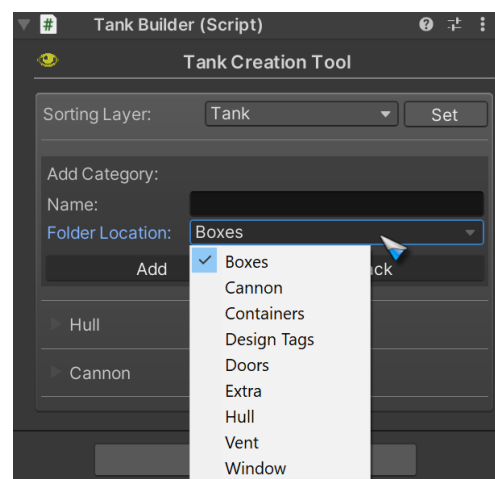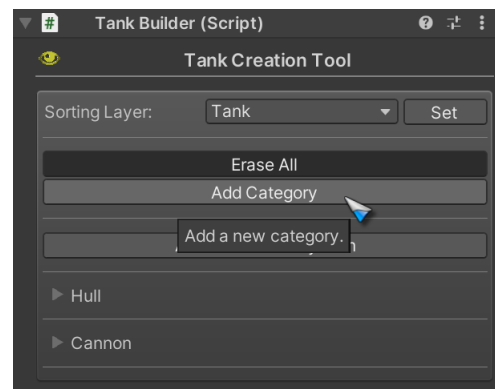
Once a category has been added, accessories can be placed on the tank by clicking the plus button. Alternatively, a copy of an existing accessory can be made through clicking the plus button located beside the accessories name.
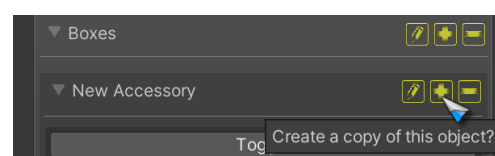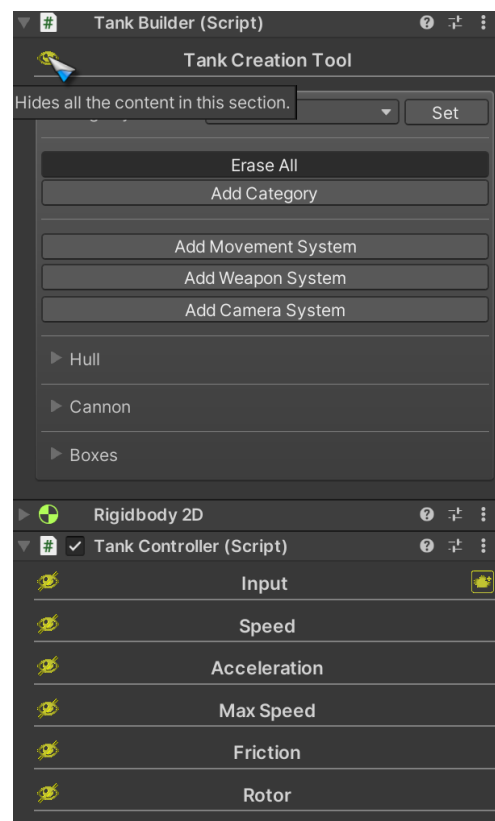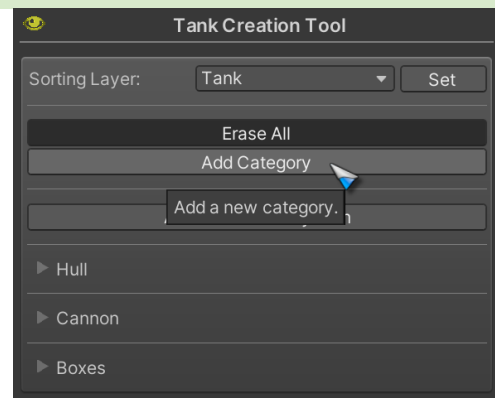
Once all the desired accessories have been added to your tank, a movement system can be added at the click of a button. Click the "Add Movement System" and two new components will immediately be added to your tanks game object as seen in the image to the right.

The Tank Controller component cannot work without a Rigidbody 2D component and thus it cannot be removed without first removing the Tank Controller.

Once the Tank Controller component has been added, you may feel that the inspector tab is becoming quite cluttered. The eye buttons at the top-right corner of each section can be clicked to hide all its content.
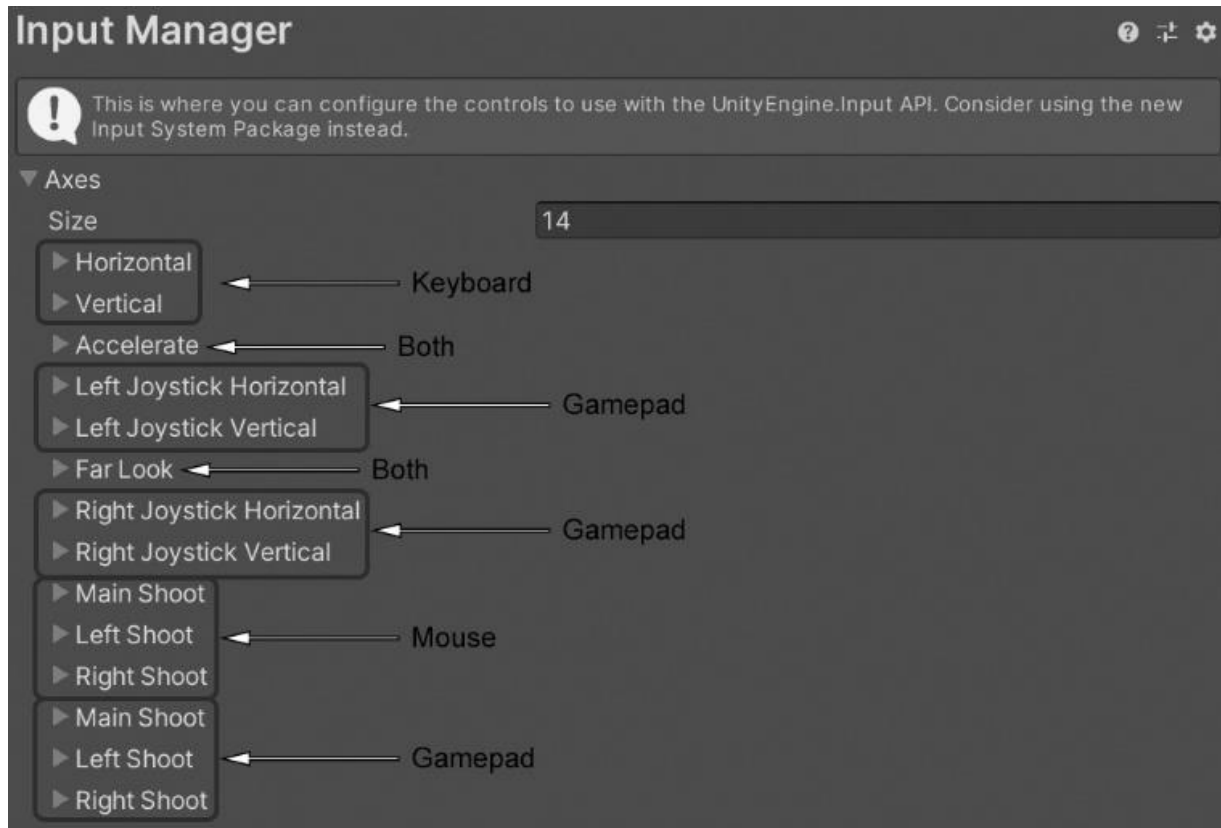
INPUT MANAGER (OLD)

Below is all the default setting for the old input manager found in the project settings:

<u>Overview:</u>

Click the desired input in the image below:

Individually:

Horizontal	
Name	Horizontal
Descriptive Name	
Descriptive Negative Name	
Negative Button	left
Positive Button	right
Alt Negative Button	a
Alt Positive Button	d
Gravity	3
Dead	0.001
Sensitivity	3
Snap	✔
Invert	☐
Type	Key or Mouse Button
Axis	X axis
Joy Num	Get Motion from all Joysticks

Vertical	
Name	Vertical
Descriptive Name	
Descriptive Negative Name	
Negative Button	down
Positive Button	up
Alt Negative Button	s
Alt Positive Button	w
Gravity	3
Dead	0.001
Sensitivity	3
Snap	✔
Invert	☐
Type	Key or Mouse Button
Axis	X axis
Joy Num	Get Motion from all Joysticks

Accelerate

Name	Accelerate
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	left shift
Alt Negative Button	
Alt Positive Button	joystick button 0
Gravity	1000
Dead	0.001
Sensitivity	1000
Snap	☐
Invert	☐
Type	Key or Mouse Button ▼
Axis	X axis ▼
Joy Num	Get Motion from all Joysticks ▼

Left Joystick Horizontal

Name	Left Joystick Horizontal
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.19
Sensitivity	1
Snap	☐
Invert	☐
Type	Joystick Axis ▼
Axis	X axis ▼
Joy Num	Get Motion from all Joysticks ▼

Left Joystick Vertical

Name	Left Joystick Vertical
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.19
Sensitivity	1
Snap	☐
Invert	✓
Type	Joystick Axis ▼
Axis	Y axis ▼
Joy Num	Get Motion from all Joysticks ▼

Far Look

Name	Far Look
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	f
Alt Negative Button	
Alt Positive Button	joystick button 4
Gravity	0
Dead	0.19
Sensitivity	1
Snap	☐
Invert	☐
Type	Key or Mouse Button ▼
Axis	5th axis (Joysticks) ▼
Joy Num	Get Motion from all Joysticks ▼

Right Joystick Horizontal

Name	Right Joystick Horizontal
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Joystick Axis ▼
Axis	4th axis (Joysticks) ▼
Joy Num	Get Motion from all Joysticks ▼

Right Joystick Vertical

Name	Right Joystick Vertical
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	✔
Type	Joystick Axis ▼
Axis	5th axis (Joysticks) ▼
Joy Num	Get Motion from all Joysticks ▼

Main Shoot

Name	Main Shoot
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	mouse 0
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Key or Mouse Button
Axis	5th axis (Joysticks)
Joy Num	Get Motion from all Joysticks

Left Shoot

Name	Left Shoot
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	mouse 0
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Key or Mouse Button
Axis	5th axis (Joysticks)
Joy Num	Get Motion from all Joysticks

Right Shoot

Name	Right Shoot
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	mouse 1
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Key or Mouse Button
Axis	5th axis (Joysticks)
Joy Num	Get Motion from all Joysticks

Main Shoot

Field	Value
Name	Main Shoot
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Joystick Axis
Axis	9th axis (Joysticks)
Joy Num	Get Motion from all Joysticks

Left Shoot

Field	Value
Name	Left Shoot
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Joystick Axis
Axis	9th axis (Joysticks)
Joy Num	Get Motion from all Joysticks

Right Shoot

Field	Value
Name	Right Shoot
Descriptive Name	
Descriptive Negative Name	
Negative Button	
Positive Button	
Alt Negative Button	
Alt Positive Button	
Gravity	0
Dead	0.1
Sensitivity	1
Snap	☐
Invert	☐
Type	Joystick Axis
Axis	10th axis (Joysticks)
Joy Num	Get Motion from all Joysticks

DEMO

Demo

VIDEO TUTORIALS

YouTube Video

CONTACT

Please see my portfolio in the link below and I can be contacted either through LinkedIn or Twitter.

Portfolio